

Amendment Under 37 C.F.R. § 1.114(c)
USSN 09/911,519

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A method of transferring user data packets from a terminal to a mainframe of an S-CDMA point to multi-point system, comprising: repeatedly transmitting a reference data packet coded with a pilot code for the duration of the connection between terminal and mainframe, wherein the reference data packet contains previously known information, and sequentially sending user data packets coded with at least one communication code different from said pilot code, which user data packets in each case comprise the user information to be transferred.

2. (Previously Presented) The method according to claim 1, wherein each terminal is allocated a pilot code, at least for the duration of a connection, and each terminal is allocated at least one communication code at least for the duration of the transfer of a user data packet.

3. (Previously Presented) The method according to claim 1, wherein the coding of the reference data packet with the pilot code takes place synchronously in time to the coding of the user data packets with the at least one communication code.

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4. (Previously Presented) The method according to claim 3, wherein from each reference data packet and user data packet or user data packets synchronously coded in time, a summation signal is formed which, after subsequent modulation, is transmitted to the mainframe.

5. (Previously Presented) The method according to claim 1, wherein at the times at which a user data packet is being transmitted, no reference data packet is transmitted.

6. (Previously Presented) The method according to claim 1, wherein the pilot codes are CDMA codes and the communication codes are CDMA codes, wherein the pilot codes originate from a different CDMA code family from the communication codes and wherein no pilot code is identical to any communication code.

7. (Previously Presented) The method according to claim 1, wherein the pilot codes are orthogonal to one another and the communication codes are orthogonal to one another.

8. (Previously Presented) The method according to claim 1, wherein the pilot codes are not orthogonal to one another and the communication codes are orthogonal to one another.

9. (Currently Amended) A mainframe for an S-CDMA point to multi-point system for transferring user data packets from terminals to the mainframe, said mainframe repeatedly receiving a reference data packet coded with a pilot code and containing previously known information on each connection to a terminal and deriving synchronization information from the

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signal of the reference data packet, wherein the mainframe receives user data packets, coded with at least one communication code different from said pilot code, comprising user information on each connection to a terminal.

10. (Previously Presented) The mainframe according to claim 9, said the mainframe being suitable for deriving from the signal of the reference data packet information on the signal quality.

11. (Previously Presented) The mainframe according to claim 9, comprising a control unit to allocate pilot codes and communication codes to terminals, wherein for each connection of a terminal to the mainframe a pilot code and at least one communication code at least for the duration of the transfer of a user data packet is assigned by the control unit.

12. (Previously Presented) The mainframe according to claim 9, comprising at least one measuring unit to determine the signal-to-noise ratio for each connection to a terminal from the received pilot codes.

13. (Previously Presented) The mainframe according to claim 9, comprising at least one measuring and control unit is provided to measure the signal levels of the received reference data packets and for telemetric regulation of the transmitting levels of the terminals for the reference data packets and/or the user data packets as a function of the measured signal levels.

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14. (Previously Presented) The mainframe according to claim 9, said mainframe being constructed as a base station for an LMDS system.

15. (Currently Amended) A transmitting device for an S-CDMA system, comprising a first coder for coding a reference data packet with a pilot code and a second coder for coding user data packets with at least one communication code are provided different from said pilot code, wherein the reference data packet contains previously known information and the user data packets comprise the user information to be transferred and an adder is provided for adding the output signals of the coders.

16. (Previously Presented) The transmitting device according to Claim 15, comprising a modulator for HF modulation of the output signals of the adder.

17. (Previously Presented) The mainframe according to claim 9, repeatedly receiving only one reference data packet coded with a pilot code on each connection to a terminal.

18. (Previously Presented) The transmitting device according to claim 15, wherein only one reference data packet is coded by the first coder on each connection to a mainframe.

19. (Previously Presented) The method of claim 1, wherein the mainframe and the terminal are always synchronized during the entire duration of the connection.

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20. (Previously Presented) The mainframe of claim 9, wherein the mainframe and the terminal are always synchronized during an entire duration of the connection.

21. (Previously Presented) The transmitting device of claim 15, wherein the transmitting device is always synchronized to a mainframe during an entire duration of a connection thereto.